

CHAPTER 4 - DRMO PROCESSING

A. GENERAL. DoD generating activities and participating Federal agencies normally turn in all precious metals and precious metals bearing property to their servicing DRMO. Irrespective of the precious metals properties of the material, all other requirements, e.g., demilitarization, inert certification, hazardous/toxic precautions, etc., must be met.

B. RECEIPT

1. Accept accountability for precious metals bearing property/scrap turned in or reported by DoD and participating Federal agencies, except where acceptance is precluded by law or regulation. If appropriate storage or security facilities are not available at your DRMO, you should make arrangements with the generating activity to retain custody, or with the host installation to accept custody, until such time as appropriate disposition can be offered.

2. Process receipt of precious metals bearing property and scrap according to DRMS-I 4160.14, Volume II, Chapter 2. DRMOs receiving property from another DRMO **will process the precious metals bearing property using accounting code F (Receipts from other DRMOs).**

a. NSN/LSN:

(1) ***If any precious metals bearing commodities are received, stored, and handled as NSNs/LSNs due to environmental requirements, then the DRMO should also keep a tally of the items by net pounds for the purpose of reporting for the recovery contracts.***

(2) NSN-identified items containing precious metals should be identified in the PMMF (see Chapter 3, paragraph B). Property containing precious metals is also identified in the NSN Characteristic File (udwrnsnc) located in the DAISY Tables, Part 1. The field name is: prec_metl_ind_cd, which stands for precious metals indicator code (PMIC). (See the DAISY CAT handbook and Supplement 4 to this instruction for a definition of PMIC codes.) The PMIC codes identify the precious metals content of an item. They are presented on the DAISY NSN characteristic file as a result of a NSN characteristic search from DLSC's Federal Logistics Information System (FLIS) **when a valid NSN is entered.** They have been approved for use in DoD 4000.25-1-M and must appear on the DTIDs.

b. Record receipt of precious metals **bearing** scrap by the appropriate Scrap Classification List (SCL) code identified in DRMS-I 4160.14, Volume IV, Supplement 1.

(1) Immediately process generations of V-coded SCLs upon receipt and provide the generating activity a proof-of-delivery copy.

(2) Weighing of precious metals bearing scrap

(a) Weigh all receipts, downgrades and shipments of V-coded precious metals bearing material/scrap by a DRMO-assigned precious metals weighmaster or alternate. The person weighing the precious metals cannot be the same person **who is** doing the receiving, downgrading or packing for shipping. If suitable scales are not available or operative and it is not economically feasible to use other scales, waiver may be granted by the DRMS-DE/DW/DRMSI Deputy Commander for a period not to exceed 6 months. If generations cannot be weighed immediately upon receipt, place in a secure storage area according to Chapter 5, paragraph C, pending receipt processing.

(b) Weigh generations of SCLs P8A, P8B, P8C, VCS, VGM, VPM, VSF and VSM in the presence of a disinterested person who will verify the weight and countersign the receipt document. A disinterested person is a DRMO employee not directly involved in the receipt, storage, issue and accounting for precious metals bearing material or scrap. The disinterested person cannot verify receipts more than 2 consecutive days within a week. In the event personnel constraints preclude adherence to this requirement, a waiver may be granted by the DRMS-DE/DW/DRMSI Deputy Commander for an indefinite period subject to review for justification every 6 months.

(3) Receipt of material in sealed containers

(a) A sealed container is any container which has been secured with twist-ties, tape, sealing wax, staples, wire seals, or any other means of closure to preclude spillage/leakage or to increase security of material. Banded tri-walls, secured wooden boxes or drums without wire seals are not considered sealed containers.

(b) Weigh sealed containers as received, i.e., without removal of any tape, seals, etc., and the gross weight entered on the DTID. Then open containers for verification of contents and proper classification.

(c) Leave generations of all V-coded SCLs, and any other SCL which cannot be removed from the container intact, in the original container and resecured following receipt processing. Enter the gross weight into the system and annotate the DTID accordingly. An exception to this requirement is when the container and/or DTID reflect a tare weight (e.g., sealed drums containing film ash). In this situation, compute the net weight by subtracting the listed tare weight from the DRMO-derived gross weight. Annotate this computed net weight on the DTID and enter into the system.

(d) Remove generations of material which can be removed from the container without potential loss and obtain a net weight to enter into the system. If the material is returned to the original container, annotate the DTID to reflect that material was received as net weight.

(4) Process electronic scrap which has been identified as a cost effective candidate for precious metals recovery into the system as SCL P24 pending subsequent segregating and sorting. Do not offer SCL P24 for sale without the approval of HQ DRMS.

(5) Process receipts of SCL VSF to retain individual integrity. Attach one copy of the DTID to each receipt of SCL VSF; annotate DTID as to wet or dry weight upon receipt.

(6) DTIDs for SCL P06 must identify the serial number and weight for each cartridge.

(7) Generations of SCL P02, expended hypo solution, must be manifested by the generator if applicable under RCRA regulations. Do not process generations of SCL P02 received by the DRMO for the silver. Instead, offer for national sale or place on a disposal contract.

(8) Do not accept classified film and other precious metals bearing classified material (either usable or scrap) at your DRMO unless the DTID contains generating activity certification of declassification. However, residue from declassification by burning or other means of destruction may be accepted.

3. Perform any repackaging of SCLs VCS, VGM, VPM, VSF and VSM in the presence of a disinterested person. Add a statement to the file copy of the generator's DD Form 1348-1A (for repackaging at receipt) or to the DRMO's DD Form 1348-1A (for repackaging after receipt) stating that "material was repackaged" and initialed by both the person performing the repackaging and the witness.

C. REQUEST FOR ASSAY

1. You may submit material, either usable or scrap, suspected or known to contain precious metals for assay/analysis. Among the more obvious reasons for requesting an assay are:
 - a. Item suspected to contain precious metals but not identified in PMMF or by other documentation.
 - b. Material known to contain precious metals but percent, location, etc., unknown.
 - c. Material for which no factors exist on which to base an economic analysis.
2. Use DRMS Form 1648 (see Supplement 4 for a sample DRMS Form 1648) to document assay request, and results. Process DRMS Form 1648 as follows:
 - a. DRMO PMM: Complete appropriate entries on DRMS Form 1648.
 - b. Send DRMS Form 1648 to **DRMS-LM** for concurrence. Annotate on the form whether assay can be obtained locally.
 - c. After concurrence, attach DRMS Form 1648 to the DD Form 1348-1A and package with a sample of the material. Mark the DD Form 1348-1A and the package with "Material for Assay."
 - d. As directed, ship the material to DRMS procured assay contractor or obtain local assay.
 - e. If assay is done locally, provide results to **DRMS-LM**.
 - f. If contracted out, **DRMS-LM** returns results of the assay/analysis to the requester.
 - g. When appropriate, **DRMS-LM** incorporates results into the PMMF.

D. SALES VERSUS RECOVERY

1. Usable precious metals bearing items which have survived screening normally are offered for sale. However, when those items have value only for their basic material content, those items are by definition scrap and should be downgraded and processed for precious metals recovery. Offer the item for sale when unsure whether expected proceeds will exceed the material content value. Prepare a cost analysis along with the sales item description following lotting of property. Use this cost analysis to serve as the basis for determining **minimal acceptable price**.
2. If appropriate, document the cost analysis on DRMS Form 984 (see Supplement 4 for a sample DRMS Form 984 and detailed instructions for completing DRMS Form 984). DRMS-DE/DW/DRMSI operations monitor will review all DRMS Forms 984.
3. The following property is exempt from sales and must be processed for precious metals recovery after completion of any required screening:
 - a. Silver bearing batteries.
 - b. Silver bearing hypo solution.
 - c. Sludge.
 - d. Spent **silver** recovery cartridges.

- e. Passive silver cells (all SCL PSC).
- f. Non-usable and non-reimbursable spark plugs and magneto breaker assemblies contact points.
- g. Aircraft structural components containing precious metals.
- h. Property which by regulatory requirement must be processed for precious metal recovery (see DoD 4160.21-M and Chapter 3 of this instruction).
- i. Property for which recovery has been proven cost effective (for like or similar property) over the past 12 month period.
- j. Certain AE equipment as follows:

(1) Precious metals bearing equipment identified as cost effective for precious metals recovery. Downgrade this equipment to scrap **after ESD** and process for precious metals recovery. Some examples are: central and individual processing units; processor; control units and controllers; disc or tape control units and controllers; memory units; and disc storage and control units.

(2) Offer precious metals bearing equipment which is primarily mechanical and not cost effective for precious metals recovery for sale without completion of DRMS Form 984 or application of the Minimum Acceptable Price clause. A VISUAL INSPECTION IS REQUIRED TO MAKE THIS DETERMINATION. Some examples are: printers; printer/keyboards; card readers and punches; and display stations/consoles.

(3) The above examples are neither all inclusive nor specific. It may be that like items have been identified by the generator using a different nomenclature or noun description.

4. Uneconomical Precious Metals Commodities. The following are some of the precious metals bearing commodities that DRMS has tested and evaluated, and found not to be economical for precious metals recovery. These materials are NOT to be collected for precious metals recovery, but must still be considered for the other aspects of disposal such as RTD, sales/recycling and hazardous disposal. Some of those uneconomical precious metals bearing commodities are:

Dental amalgam, CD-ROMs, microfiche masters, microfiche film, magnetic film, 3-M reader printer paper, computer monitors and keyboards.

E. DRMO SPECIAL PROCESSING

1. SCL P24 Segregation/Breakdown

- a. On the majority of SCL codes, the DRMO performs no further processing other than receiving, weighing, repackaging and shipping out on contract or other designated location.
- b. When precious metals bearing material is downgraded to scrap for precious metals recovery, or when precious metals bearing scrap is being reclassified for any reason, e.g., breakdown, erroneous classification, etc., adhere to the weighing requirements in paragraph B2b(2). Segregate, sort and record the precious metals bearing scrap by the appropriate SCL code (see DRMS-I 4160.14, Volume IV, Supplement 1).
- c. Segregate and sort precious metals bearing scrap to the extent feasible for economical precious metals recovery. In the case of SCL P24 breakdown, this is contingent on a variety of factors and must be determined on an individual DRMO basis. In general SCL P24 should not be broken down to the extent that the cost of labor of further breakdown and refining exceeds the value of the material or the cost of processing the extra weight on the refining contract. Prior to shipping SCL P24 to a centralized breakdown site,

extraneous non-precious bearing materials, e.g., doors to cabinets, etc., should be removed in order to reduce transportation costs.

d. The identification aids included in DoD 4160.21-H, Defense Scrap Yard Handbook may be required to properly sort and/or classify precious metals bearing scrap.

e. Use the Electronic Scrap (SCL P24) Breakdown Report, DRMS Form 1715 (see Supplement 4 for a sample DRMS Form 1715) to manage scrap records resulting from the breakdown of SCL P24. The use of this form is mandatory at DRMOs that process SCL P24.

f. Any SCL P24 or SCL P8E which has been shredded/pulverized due to declassification reasons should be suspected of being contaminated with PCBs. Any that is turned in or already on hand must have a laboratory analysis for PCBs. Do not process material containing PCBs for precious metals, but rather place on an ultimate disposal contract and fund according to ultimate disposal policies.

g. On occasion, DRMS grants approval for a sale of SCL P24 to test the market to determine if sale would be more economical than precious metals recovery (see Supplement 4 for the formula to use for this purpose).

2. Photographic Film and Papers (SCL P04)

a. Generators are not required to perform any sorting/segregation of film and paper other than basic exclusion of scrap not normally associated with photographic products as well as the exclusion of non-silver bearing photo products such as color prints. Generators are not required to remove other non-precious metals bearing material, such as plastic and metal reels and film canisters, as well as film jackets, miscellaneous paper, paper clips, etc., although they should be encouraged to do so. An exception to this requirement is motion picture films, of which the generator should certify film is not sensitive to the copy right encumbrance or privacy act, and has been removed from the reels and reduced to 6-inch strips or burned. (See DoD 4160.21-M, Chapter VIII, paragraph B36b.) DRMOs are reminded that classified film may not be received.

b. Outdated photographic materials which might be of interest to amateur photographers (e.g., 35mm film) should be offered for sale without an upset price, as recovery in its current configuration would not be cost effective.

c. Film samples submitted for analysis to determine the toxicity of silver did not exhibit the characteristics of toxicity according to 40 CFR 261.24, Table 1, and therefore, should not be managed as a hazardous waste.

d. The transfer of large quantities of records containing personal data (for example, film) in bulk is not a release of personal information. The sheer volume of such transfers makes it difficult or impossible to identify readily specific individual records. If bulk is maintained, no special procedures are required (see DLAR 5400.21). Small quantities of records containing personal data turned in must have a statement that the records are in compliance with the Privacy Act.

3. Film Ash (SCL P05). Ship film ash as directed in the shipping matrix (see Supplement 4 for matrix).

a. Ensure that each container of film ash shipped is marked with the appropriate gross, tare and net weights as well as the correct SCL.

b. Film ash samples submitted for analysis to determine the toxicity of the following metals in film ash: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver, did not exhibit the characteristics of toxicity according to 40 CFR 261.24, Table 1, and therefore, should not be managed as a hazardous waste.

4. Silver Batteries

a. Silver batteries are not authorized for sale (see DoD 4160.21-M, Chapter VIII, paragraph B101). Because of their value, silver batteries should not be referred for ultimate disposal. The preferred disposal action is to recycle all silver batteries for precious metals recovery.

b. Recycled for Precious Metals Recovery

(1) Unused or shelf life expired silver batteries that are recycled and contain no corrosive electrolyte may be managed as hazardous material (HM), regulated for transportation. The electrolyte, which may be classified as a corrosive, is normally stocked in a container independent of the battery and will be processed separately.

(2) Used silver batteries that are recycled are managed as HW if they exhibit one or more characteristics based on the criteria in 40 CFR 261, Subpart C. Used silver batteries that are recycled are managed as HM if they do not exhibit one or more characteristics based on the criteria in 40 CFR 261, Subpart C. If managed as HW, follow the provisions of 40 CFR 266.70. If managed as HM, they are regulated for transportation.

c. Do not drain electrolyte from the batteries. If the generator cannot perform this task, the batteries can be recycled for precious metals recovery but must be regulated as HW.

5. Photo Fixer/Hypo Solution (SCL P02). Do not receive P02 at your DRMO for PM processing to extract the silver. P02 is not normally shipped because the silver is extracted at the generator's site. Spent hypo solution is managed under RCRA, 40 CFR, Subpart F of Part 266, if it exhibits one or more of the hazardous waste characteristics. ***Disposal of photo fixers should be offered for national sale or placed on a disposal service contract.*** The spent hypo solution must be manifested by the generator if applicable under RCRA regulations. See DRMS-I 6050.1, Chapter XXVIII for additional guidance.

6. Passive Silver Recovery Cells (SCL PSC). This scrap code includes all passive silver recovery cells (Accu-Techs, Peterson Silver Cells, Silver Sure cores, etc.), from tandem cell units, Peterson Super Cells, McKay 6 ½ gallon, Mini McKay and Silver Sures. These all employ the same technology and will all be referred to as passive silver cells. Passive silver cells are another method of recovering silver from photographic solutions. The passive silver recovery cell buckets look similar to steel wool chemical recovery cartridges (SCL P06) from the outside (see Supplement 4 for illustrations contrasting the two types). Internally, the silver cell contains a layer of silver coated mesh wrapped around an inner core of copper plated steel wire, all on a spool. When filled with photo fixer. The different metals react in the slightly acidic fixer creating an electrical charge which causes the silver in the fixer to electroplate onto the wire mesh core. There is no external electricity used. PSC are to be turned in dry and will not be regulated under RCRA unless otherwise dictated by state and/or local regulations.

7. Silver Recovery Cartridges (SCL P06). ***This scrap code includes steel wool cartridges that are mostly white or gray five gallon buckets. Some manufacturers of P06 are Kodak, Worldwide, IMG or Vault 1/1C.***

a. Cartridges managed as material. Cartridges will not be regulated under RCRA if they have been flushed of hypo solution and refilled with water for transport, unless otherwise dictated by state and/or local regulations.

(1) This guidance is based on the following interpretation. We consider spent hypo solution a hazardous waste because it is a spent material exhibiting a characteristic. However, once the silver has been removed from the hypo solution, and the silver in the cartridges, it is not regulated. It is no longer a solid waste but a material reclaimed from a hazardous waste and meets the criteria of 40 CFR 261.3,(c)(2)(I), e.g., material reclaimed for beneficial use and not burned for energy recovery or used in a manner constituting disposal.

(2) Additionally, final rule guidance in the Federal Register, Volume 50, No. 3, Jan 4, 1985, states: "Similarly, reclaimed metals that are suitable for direct use, or that only have to be refined to a usable product are products and not wastes." The silver contained in the cartridges is picked up by our refining contractor and the silver does not require further reclaiming before recovery is complete.

b. Cartridges managed as hazardous waste. Silver recovery cartridges containing spent hypo solution will be managed under RCRA, 40 CFR, Subpart F of Part 266, if they exhibit one or more of the hazardous waste characteristics. The spent hypo solution in this case would require a TCLP **for silver** at or above 5 ppm.

c. To manage cartridges as material, you must know that the cartridges have been flushed and are filled with water and not hypo solution. If you can't determine, then regulate the cartridges as hazardous waste.

d. State regulations may differ. If the steel wool cartridge is a state regulated waste, then the cartridges must be managed as a hazardous waste in that state. Contact the appropriate state regulatory agencies, DRMS-DE/DW/DRMSI, or **DRMS-LH** to determine what state regulations apply.

e. Manifesting instructions are contained in paragraph G.

8. Cyanide-Based Solutions (SCL P07) and Acid-Based Solutions (SCL P08) are Hazardous Waste. These materials can also be identified on the DRMO records as NSN or LSN. Promptly report all generations to DRMS-LM for disposition instructions. Include complete documentation (the turn-in document, waste profile sheet, laboratory analysis, assay report, etc.). DRMS-LM will evaluate the economics of recovery and provide instructions to hold for recovery or release the property for other disposal means.

9. Rhodium, Ruthenium, Iridium and/or Osmium Precious Metals Bearing Materials. Report generations of these commodities to DRMS-LM for disposition instructions. Classify material as either SCL P8A or SCL VPM. Maintain individual site integrity for this material pending receipt of disposition instructions.

10. SCL P8E. There are 32 DRMOs CONUS-wide that are considered collection/pickup sites for SCL P8E. Those DRMO sites are:

**Anchorage
Bluegrass
Columbus
Eglin
Jacksonville
Letterkenny
Norfolk
Patrick
Philadelphia
Stockton
Warner Robins**

**Barstow
Cherry Point
Crane
Hill
Keesler
Lewis
North Island
Patuxent River
Rock Island
Texarkana
Williamsburg**

**Benning
Colorado Springs
Great Lakes
Huntsville
Kirtland
McClellan, CA
Oklahoma City
Pensacola
San Antonio
Tucson**

If your DRMO is not one of the above sites, then you should be doing a DRMO to DRMO shipment to transfer your P8E. If your DRMO generates large quantities of P8E yearly (50,000 pounds or more) and wishes to be considered as a P8E collection/pickup site, notify DRMS-LM with your request.

F. DRMO TO DRMO SHIPMENTS

1. Due to the new methods utilized in the refining contracts, CONUS DRMOs need not ship materials from DRMO to DRMO unless otherwise identified in Supplement 4, Shipping Instructions for Precious Metals Bearing SCLs.

2. Normally, precious metals bearing material to be processed for precious metals recovery is downgraded to scrap prior to shipment. The only exception would be items which are required to be tracked by national stock number (e.g., hazardous material). Do not ship precious metals bearing hazardous wastes (e.g., material which requires manifesting) to another DRMO. **Overseas DRMOs wanting to ship hazardous waste precious metals bearing materials to CONUS are to contact the receiving DRMO to verify material can be received. If receiving DRMO cannot accommodate the issuing DRMO's material, contact DRMS-LM for further guidance.**

3. Shipping instructions for all SCLs are provided in Supplement 4, **Shipping Instructions for Precious Metals Bearing SCLs**. The matrix decision table lists the SCLs and a code to indicate what is to be done with each, depending upon whether the DRMO is CONUS or overseas. The legend that accompanies the table explains the instructions for each code.

4. Initiate shipment when sufficient quantities accumulate for economical shipment, taking into consideration secure storage requirements. Normally shipments will not be more frequent than monthly. Conversely, DRMOs should ensure that precious metals bearing scrap eligible for shipment is not held longer than 90 days.

5. Verify the weight of material prior to shipment. When this verification reveals a discrepancy in the system scrap record, make appropriate adjustment according to DRMS-I 4160.14, Volume IV, Chapter 6.

6. Shipping DRMO must coordinate any shipment in excess of 2,000 pounds with the **receiving** DRMO before shipment.

G. PACKAGING, CRATING, HANDLING AND TRANSPORTATION (PCH&T)

1. Arrange PCH&T for precious metals scrap with host transportation; however, USPS shipments may be accomplished by the DRMO. You should pack precious metals scrap in a manner that ensures arrival of the shipment in the same condition as shipped. Unless otherwise specified in this paragraph, ship precious metals scrap by the most economical means available, consistent with safe transit and delivery.

2. Utilize care and sound judgment in selecting the proper type, size and weight of containers and closures, as well as the proper transportation mode. The guidance in this section has been developed to facilitate handling of shipments and to preclude loss of precious metals scrap. Coordinate closely with host transportation to ensure that shipments of precious metals scrap are afforded due security and priority considerations. Also that the packaging/packing and transportation mode used comply with the requirements of this paragraph or are a suitable alternative.

3. The use of the word "packaging" refers to any bag, can, box, etc., used to preserve the integrity of an individual SCL; use of the word "packing" refers to any box, container, etc., used to ship one or more SCLs.

4. The following guidelines apply to shipments of precious metals scrap:

a. General

(1) Pack each SCL separately.

(2) Mark each packing container with the gross, tare and net weights.

(3) Do not use containers in poor condition.

(4) Mark shipping containers to indicate the number within each shipment, e.g., 1 of 1, 2 of 4, etc.

(5) A GBL for shipment of multiple SCLs must reflect all DTIDs included in the shipment.

b. USPS Shipments (or comparable).

(1) Shipments of P-coded SCLs through USPS must be certified, return receipt requested; shipments of V-coded SCLs must be registered, return receipt requested, when available. When not available, use certified mail, return receipt requested.

(2) Shipments cannot exceed USPS maximum weight limitations.

(3) Seal outer container securely with strong packaging tape.

(4) Recommended standard shipping containers for USPS shipments are available through GSA as follows:

(a) 6" x 9" plastic bag, NSN 8105-00-660-0603.

(b) 9" x 12" plastic bag, NSN 8105-00-159-4998.

(c) 4" x 4" x 4" shipping box, NSN 8115-00-290-3363.

(d) 8" x 4" x 4" shipping box, NSN 8115-00-290-3365.

(e) 1" x 8" x 6" shipping box, NSN 8115-00-179-0570.

c. Other Shipments

(1) You should band tri-walls and other large shipping containers to pallets. Single drums and small containers which are not palletized should be banded or sealed to ensure closure is kept intact; annotate containers "This end up."

(2) You should use standard size shipping containers whenever possible. A standard size container is defined as having base dimensions slightly exceeding the base dimensions of a standard size pallet.

(3) Drums used for shipment must have lids and must be sealed.

(4) A palletized shipment or individual container must not exceed gross weight of 3,000 pounds.

5. See Supplement 4 for factors to be used in determining the value of material being shipped.

6. Some precious metals scrap requires special handling or packaging/packing. In addition to the above requirements, the following special instructions apply:

a. Scrap Silver-Cell Batteries (SCLs P12, PB2, PB4, PB5, and PB6). Do not ship leaking batteries if the electrolytic reservoir has been damaged and electrolyte is leaking. Instead, handle in accordance with DRMS-I 6050.1, **Chapters XXI and VII**. If received in CONUS as HM/HW, place on a precious metals recovery contract. If overseas, place on sale or ultimate disposal contract.

b. Exhausted Chemical Recovery Cartridges (SCL P06):

(1) Manifesting

(a) Cartridges which are not hazardous waste according to paragraph E7 above and are not regulated by the state in which they are generated, do not need to be manifested **unless** the state the recovery contractor is located in regulates the cartridges.

(b) Cartridges which are hazardous waste according to paragraph E7 above and/or are regulated by the state they are generated in will be manifested as "Hazardous waste liquid, n.o.s., 9, NA 3082, PG III (D011)." According to 49 CFR 172.203, all "N.O.S." proper shipping names must include technical names or EPA hazardous waste number(s) as part of the shipping name directly after the UN or NA number. Land disposal restriction notifications as stated in 40 CFR 268.7(a)(1) should be sent with these items. **(For additional information on land disposal notification, see DRMS-I 6050.1, Chapter IV.)**

(2) Mark all cartridges shipped under a precious metals contract with a HAZARDOUS WASTE label per 40 CFR 262.32 and 49 CFR 172.304. Cartridges shipped within California must be marked according to Title 22, Section 68504(c), California Code of Regulations.

(3) The generator is responsible to ensure that cartridges are filled with hypo solution or water prior to turn-in to the DRMO to prevent oxidation and resultant fire hazard while in transit. ***The generator must identify on the DTID whether the cartridge contains water or hypo solution. If cartridge is filled with hypo solution, the DRMO may choose to accept accountability only depending on location of the generator and DRMO hazardous storage capabilities. The generator is also responsible to remove the reusable circulating by-pass unit and replace it with screw on caps prior to turn in.*** Remove the screw-on caps on cartridge top and add liquid slowly until cartridge is full; replace screw-on caps tightly. Do not remove metal ring around the cartridge. DO NOT ship with circulating unit attached; remove and replace with screw-on caps. Circulating units are reusable and your operations monitor should be notified of receipt. DRMO personnel are not normally authorized to open hazardous waste containers. **An exception is granted for this action.**

(4) Place any cartridge in poor condition in a heavy plastic bag and then overpack in a heavy cardboard box, wooden box, or metal container. ***If the cartridge is considered HW the cartridge must be repackaged in a salvage drum meeting the requirement of 49 CFR 173.203.*** A cartridge is considered to be in poor condition whenever any of the following exists:

- (a) The cartridge is leaking.
- (b) The metal ring around the top of the cartridge is missing, broken, rusted or otherwise deteriorated.
- (c) Visual inspection of the cartridge reveals evidence of corrosion, cracks, fractures or dents in the plastic.

c. High Purity Precious Metals (V-coded SCLs):

(1) Use USPS registered mail, return receipt requested when available. When not available, use certified mail, return receipt requested. If quantities of one requisition exceed USPS weight limitations and material cannot be separated without disturbing the integrity of individual generations, ship through host transportation and request use of the DD Form 1907.

(2) Package and seal material in rigid plastic containers or double plastic bags with wire closures. Pack containers in outer shipping container using protective inner packing material as required.

d. Grindings, Sweepings and Turnings (SCL varies according to classification of material). In addition to any other requirements, do not package in paper or wooden containers as loss could occur through particle adhesion.

e. Photo Fixer (Hypo Solution) SCL P02

(1) Used photo fixer is a chemical in the solid waste stream from photographic processes. Recovery of silver from photo fixer is done at the generator's site.

(2) Disposal of Desilvered Photo Fixer. ***Desilvered photo fixer that does not meet regulatory levels for placement in the drain should be captured and disposed of via service contract.***

(3) Transportation. ***Manifesting is required as well as use of a licensed waste hauler unless the photo fixer is certified to be a non-hazardous waste.***

(4) Disposal. Desilvered photo fixer should be disposed of via service contract.

(5) Spill Prevention/Response and Disposal of Spill Residue. Guidance contained in DRMS-I 6050.1, Chapter VII, concerning spill prevention, response and reporting should be followed. The residue of a photo fixer spill should be disposed of via the DRMO disposal service contract. Precious metals recovery is waived for spill residue of this nature.

f. Passive Silver Recovery Cells (SCL PSC)

(1) When passive silver cells are taken off-line to be turned in to the DRMO, they contain high purity plated metallic silver similar to electrolytic silver flake. They are not hazardous and do not have to be stored in conforming storage. Store in the DRMO secured area. Cores from all PSCs should be placed in a double plastic bag until dry, then turned in to the DRMO.

(2) The generator must drain all fluids from the cell prior to turn-in. Cells do not need to be filled with fluid to prevent possible fire due to oxidation like SCL P06 cartridges do. If not drained, the cell could be a hazardous waste due to the soluble silver level in the fluid. Do not accept any cells unless you are sure they have been drained. Do not commingle SCLs PSC and P06 in storage.

7. Transportation between DRMOs within DRMS-DE/DW/DRMSI, GBL and non-GBL shipments (e.g., USPS shipments) will be funded and paid from the DRMS transportation account. The fund cite will be provided to the DRMOs at the beginning of each fiscal year.

H. DOCUMENTATION REQUIREMENTS

1. All shipments of precious metals scrap must be thoroughly documented. See Supplement 4 for detailed instructions for preparation of DD Form 1348-1A. A transfer of precious metals/material/scrap will reflect action/accounting code "DT" to indicate DRMO-to-DRMO/special account transfer (TTC is ***SLR = Losing Issue - Scrap***). Accomplish receipt of precious metals bearing scrap from another DRMO on an XR2 with action/accounting code "KF". Start the serial number with your DRMO RIC for DRMO-to-DRMO shipments. ***DRMS-LM*** will provide the requisition number for contractor shipments (see paragraph J, this chapter). (See DRMS-I 4160.14, Vol IV for further DRMO-to-DRMO shipments.)

2. If one SCL is being shipped, place one copy of DD Form 1348-1A in a water repellent packet inside the packing (shipping) container and three copies in a water repellent packet outside the packing (shipping) container.

3. If more than one SCL is included in the same packing (shipping) container, place two copies of DD Form 1348-1A in a water repellent packet outside the packaging container and the remaining copies inside the packing (shipping) container.

4. Upon receipt of shipping information from host transportation officer (or following DRMO initiated USPS shipment), enter transportation data on one copy of the DD Form 1348-1A. Forward this copy as the "advance copy" to the receiving DRMO for DRMO-to-DRMO transfers. If circumstances dictate deviation from guidelines in paragraph G **above**, annotate the details on this advance copy.

5. One copy of DD Form 1348-1A is to be placed in a suspense file pending return of receipt copy from the destination. It is the responsibility of the sending DRMO to follow-up on delayed or lost shipments. Unless otherwise aware of a delay in shipment, e.g., host transportation backlog, the DRMO should follow-up with the destination (**DRMS-LM** for shipments to a recovery contractor) if the receipt copy is not received within 30 days (**DRMO to DRMO shipments**)/90 days (**recovery contractor shipments**).

6. Once property is issued, accountable records can be cleared.

I. DRMO RECEIPT OF SHIPMENT

1. When a **precious metals** shipment is found to be discrepant upon receipt, issue a SF 364 if the weight variation exceeds the percentage tolerances or dollar value limitations established (see DLAR 4140.55). Issue Reports of Discrepancy (ROD) for shipments to the issuing DRMO. Send an information copy of all RODs which reflect weight shortages to the DRMS Office of Command Security **and DRMS-LM**. DRMOs must respond to a ROD within 21 calendar days, providing any and all available information. Also provide an information copy of the response to the DRMS Office of Command Security. In all discrepancies where circumstances indicate a loss due to illicit activity (i.e., theft, diversions or fraud), the receiving DRMO will immediately report the matter to the DRMS Office of Command Security, who determines if investigative referral is warranted and make appropriate internal and external notifications. In matters where fraud is suspected, make the referral determination in conjunction with DRMS-G.

2. When a shipment is received by a DRMO which is not consistent with the requirements or guidelines set forth in this section, the receipt copy returned to the shipping DRMO will specify those inconsistencies. This is a means of identifying to the shipping DRMO personnel problems of which they may, or may not, have been aware, such as host transportation deviation from requested shipment directions, omission of required data from shipment documentation, or other circumstances which could have contributed to fraud or loss/theft of property while in transit.

3. DRMOs receiving precious metals property from another DRMO must process the property as a receipt, e.g., XR1 or XR2. An interface from one DRMO to another, within DAISY, does not exist that writes an XR1 to the accountable record of the gaining DRMO when property is transferred (from another DRMO).

J. SHIPMENT ON A RECOVERY CONTRACT. Do not ship/release material to a recovery contractor without authorization from **DRMS-LM**. The authorization results from the issuance of a delivery order and can be a message, letter, **the delivery order, facsimile** or telephone **call**. Authorization will instruct the DRMO of the type and quantities of material to be released, **DRMS-LM** requisition number and any special instructions involving pickup/shipment of material. The following guidance applies:

1. Pack material in structurally sound containers, with lids, banded to pallets. Annotate each container with the gross, tare and net weights. Also mark containers with the DRMO's RIC and serially assigned number, e.g., 1 of 3, 2 of 3, 3 of 3. **If the DRMO is not sure as to what type of containers can be utilized, review the precious metals recovery contract, or contact DRMS-LM for clarification.**

2. Complete a DD Form 1348-1A for each shipment. Annotate the DD Form 1348-1A , block 27, with the contract, delivery order, CLIN **and seal** numbers. **To ensure that the DRMO receives their return copy of the contractor completed DD Form 1348-1A, the DRMO's complete mailing address must be entered on the DD Form 1348-1A.**

3. Complete a packing list for each shipment. As a minimum, the packing list will contain identification of each container in that shipment and its gross, tare and net weights.

4. Give one copy of the DD Form 1348-1A and one copy of the packing list to the truck driver. Place three copies of the DD Form 1348-1A and a packing list in a water repellent packet and attach to the outside of the last container loaded so that the packet is visible and accessible when the truck is opened.

5. You must seal each truck after loading. DRMOs are authorized to break another DRMO's seal. Seals may be obtained from host transportation or, if not available, **DRMS-LM**.

6. Forward one advance copy of the DD Form 1348-1A with a copy of the packing list to **DRMS-LM**, preferably the same day as the loading.

7. DRMOs may only load a contractor's conveyance after receipt of a shipment number from **DRMS-LM**. Contractors are under Government contract to pick up and process Government material; therefore, DRMOs should load vehicle in such a manner that material/containers arrive at the contractor's plant intact. The DRMO is encouraged to safely ensure the transporter's vehicle is fully utilized by means of double rowing and double stacking. The DRMO is also responsible for complete loading of transporter's vehicle, but any extra blocking or bracing of the shipment is the responsibility of the contractor. The DRMO will follow all safety procedures while loading.

8. Verify contractor identification prior to loading material. Documentation provided should contain at a minimum, **DRMS-LM** requisition number, contract identification, delivery order, CLIN numbers, type of material to be picked up and contractor's name.

9. Refer any problems incurred during contractor pick up to **DRMS-LM**.

10. Remove the DRMO precious metals shipments from the accountable record by a **SLR** when material is picked up or mailed to a recovery contractor for recovery. Gaining RIC for contractor shipments is "STTA".

11. Any changes or deviations to the shipping instructions on a recovery contract stated in the paragraphs above will come from **DRMS-LM**.

K. ISSUE PROPERTY TO ANOTHER DRMO/CONTRACTOR. The following screens are examples of transactions where property (precious metals shipments) is issued to another DRMO. Choose menus as follows:

1. Warehousing.
2. Item Inventory and Maintenance.
3. Issue Property.
4. Complete data fields. This process writes a TTC of SLR, or Losing Issue Between Regions-Scrap.

a. Figures 4-1 and 4-2 shows the DRMO to DRMO transaction and Event History screens.

b. Figures 4-3 and 4-4 shows the DRMO to Contractor transaction and Event History screens.

replace not stored update record 1 of 1
udwb5154.021 DAISY 05/07/97
s9d3195 ISSUE PROPERTY TO ANOTHER DRMO / PM SHIPMENTS

DTID/SCL-SC/PRLT	QTY/WT ISSUED	REQUISITION NO.	GAINING PROP RIC
LP24BMB	400	SX129441480001	SVEC

INV ITEM NAME / SCRAP NAME
SEGREGATED, NOT SORTED, ELEC. OR ELECTRONIC SCRAP CONT. PREC MET

QTY/WEIGHT ON HAND 480
NSN/LSN

ENTER DTID OR SCL/SCT NO.

F1 -Prv Form F2 -Nxt Form F3 -Prv Rec F4 -Nxt Rec F5 -Fld Help F10 More Key

4-1. Issue Property to Another DRMO/PM Shipments (DRMO TO DRMO TRANSACTION)

replace stored update record 1 of 5
udwc2998 015 EVENT HISTORY 06/07/95 11:27

VIEW ID	TRX DT	HIST ID EIN	SYCALP24BMB TRX QTY	DTID NO
DR2	11/20/93	S9D3195		SANDIA33240009
DR2	11/20/93	S9D3195		SANDIA33240010
XS8	03/08/94	S9D3035		
XP0	03/08/94	S9D3035		
SLR	06/07/94	S9D3195	400	

Press <4> to select rcd, then <F2> to view TTC; <F20> for pre-rcpt to a trx
F1 -Prv Form F2 -Nxt Form F3 -Prv Rec F4 -Nxt Rec F5 -Fld Help F10 -More Key

4-2. Event History (DRMO TO DRMO TRANSACTION)

```

      replace  not  stored      update      record      1  of      1
udwb5154.123                                     04/28/97
s9d3052      ISSUE PROPERTY TO ANOTHER DRMO  /  PM SHIPMENTS

DTID/SCL-SC/PRLT      QTY/WT ISSUED      REQUISITION NO.      GAINING PROP RIC
LP04JMA                37000                SC440372007014        STTA

INV ITEM NAME  /  SCRAP NAME
  PHOTOGRAPHIC FILMS AND PAPER OF ALL TYPES BEARING SILVER

QTY/WEIGHT ON HAND      46000
NSN/LSN

ENTER DTID OR SCL/SCT NO.
F1 -Prv Form F2 -Nxt Form F3 -Prv Rec F4 -Nxt Rec F5 -Fld Help F10 More Key

```

4-3. Issue Property to Another DRMO Store/PM Shipments (DRMO TO CONTRACTOR TRANSACTION)

```

      replace  stored      update      record      1  of      3
udwc2998  020                                     04/28/97  08:31
                                     EVENT HISTORY

      HIST ID      SYCALP24BMB
VIEW ID      TRX DT      EIN      TRX QTY      DTID NO
DR2          04/28/97  S9D3052    1000      MAHMAT71220001
DR2          04/28/97  S9D3052    45000     MAHMAT71220001
SLR          04/28/97  S9D3052    37000

Press <4> to select rcd, then <F2> to view TTC; <F20> for pre-rcpt/toa trx
F1 -Prv Form F2 -Nxt Form F3 -Prv Rec F4 -Nxt Rec F5 - Fld Help F10 - More Key

```

4-4. Event History (DRMO TO CONTRACTOR TRANSACTION)